



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/555,306	10/06/2000	Volker Timm	PHD98-119	3905

24737 7590 01/15/2004

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

KIM, AHSHIK

ART UNIT	PAPER NUMBER
----------	--------------

2876

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/555,306	Applicant(s) TIMM ET AL.	
	Examiner Ahshik Kim	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

P riod for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/20/03 (Amendment).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Amendment

1. Receipt is acknowledged of the amendment filed on October 22, 2003. In the amendment
5 claims 1 and 7 are amended. Currently, claims 1-7 remain for examination.

Claim Objections

2. Claim 1 is objected to because of the following informalities:

Re claim 1, Applicant is encouraged to substitute the phrase "data processing unit is
10 adapted to the received electrical energy." with other phrase that can further clarify the
limitations. The Office considers the phrases "wherein", "whereby", "adapted to" and "adapted
for" can raise a question to the limiting effects of the claim because it is unclear whether the
limitation(s) following the phrase are part of the claimed invention (See MPEP § 2106.II.C).

Appropriate correction is strongly suggested.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

20 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the
manner in which the invention was made.

- 25 4. This application currently names joint inventors. In considering patentability of the
claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

Art Unit: 2876

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5 Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asami (US 6,036,100) in view of Commercial (WO 99/23550).

Asami teaches a non-contact chip card 1 which includes a processor 8, the card able to connect to a reader 2 to exchange data signals via card interface antenna 3 and electrical energy via antenna 3 and rectification circuitry 9 for operation of the processor (see figure 1 and col. 3, lines 27-53). The interface antenna is coupled to the processor by an asynchronous transmission/receiving circuit (UART) 6.

Asami fails to specify that the processor contain mostly asynchronous logic components, the processor operating in a time-interleaved manner.

The concept of asynchronous logic circuitry is notoriously well known in the art to be used within cards and/or card readers. Commercial teaches the use of asynchronous logic inside a microprocessor of a chip card (see entire patent, specifically abstract and col. 1, line 16 – col. 2, line 20). Commercial discloses that it is well known to use such for concatenating or interleaving data or operations, while consuming as little power and operating time as possible.

In combination with the card of Asami, the consumption of as little power as possible from the energy provided in the signal gives the antenna the function of a reasonably ideal current (power) source for the card. In light of the motivation of Commercial, it would have

Art Unit: 2876

obvious to one of ordinary skill in the art to provide the asynchronous logic within the processor of Asami.

Response to Remarks

5 6. In the amendment, the Applicant further limited independent claims 1 and 7. Amended claims have been carefully reviewed and considered. However, it is the Examiner's view that the amended claims are still anticipated by Asami in view of Commercial.

Following is the Examiner's view on how the Asami patent still reads on "wherein energy required by the data processing unit is adapted to the received electrical energy".

10 Contactless card, in general, receives power supply and data to be read/written from the host machine. The voltage can be fluctuating depending on elements such as distance between the card and the reader, noise, strength of the signal, etc. etc. Accordingly, received voltage need to be rectified to be a stable source of operating voltage. Such voltage control process performed within the card (rectifying 4.8V to 5.0V which is the operating voltage), in the Examiner's
15 opinion, is the process of "adapting to the received electrical energy".

Applicant needs to clarify in the claims whether there are more than one operating voltages for the contactless cards, and the card is capable of operating at two distinct voltages when the host provides one of the two (or more) operating voltages.

In view of the above, it is the Examiner's position that the references to Asami and
20 Commercial still disclose the subject matter presented in instant application.

The amended claims and remarks describing these elements have been carefully considered, but they are not persuasive. This Office Action is made final.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

5 A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37
10 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Yamaguchi (US 5,432,328); Imura (US 6,513,719); Pitsch (US 6,154,550) disclose
15 non-contact IC cards. Applicant is respectfully suggested to review cited references in this Office Action.

II. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Ahshik Kim* whose telephone number is (571)272-2393. The examiner can normally be reached between the hours of 6:00AM to 3:00PM Monday thru
20 Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (703) 305-3503. The fax number directly to the Examiner is (571)272-2398. The fax phone number for this Group is (703)872-9306.

Communications via Internet e-mail regarding this application, other than those under 35
25 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [ahshik.kim@uspto.gov].

*All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly
30 signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly*

Art Unit: 2876

set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

5




Ahshik Kim

Patent Examiner

10

Art Unit 2876

December 30, 2003



MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800